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| APPLICATION NO.           | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/577,432                | 01/03/2007  | Kazem Behnamrad      | BEHN3001/FJD        | 4727             |
| 23364                     | 7590        | 06/29/2010           |                     |                  |
| BACON & THOMAS, PLLC      |             |                      | EXAMINER            |                  |
| 625 SLATERS LANE          |             |                      | GROSSO, HARRY A     |                  |
| FOURTH FLOOR              |             |                      |                     |                  |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                                      |   |
|------------------------------|--------------------------------------|---|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/577,432 | <b>Applicant(s)</b><br>BEHNAMRAD ET AL. |
|                              | <b>Examiner</b><br>HARRY A. GROSSO   | <b>Art Unit</b><br>3781                 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 April 2010.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 19-24 and 27-38 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 37 and 38 is/are allowed.  
 6) Claim(s) 19-24, 27, 28 and 33-36 is/are rejected.  
 7) Claim(s) 29-32 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 03 January 2007 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date: \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

#### **DETAILED ACTION**

The objection to the drawings has been overcome by the amendment filed April 1, 2010. The objection is withdrawn.

The objection to the specification has been overcome by the amendment filed April 1, 2010. The objection is withdrawn.

The objection to the claims has been overcome by the amendment filed April 1, 2010. The objection is withdrawn.

The rejection of claims 29-32 under 35 U.S.C. 112, second paragraph, has been overcome by the amendment filed April 1, 2010. The rejection is withdrawn.

#### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "66" has been used to designate both the neck opening and a radial recess (page 12 and Figure 6).
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 19, 21, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Rowland et al (GB 546,775).
5. Regarding claim 19, Rowland discloses the cap (Figures 1-3, page 5) with sealing part (14) with a sealing ring (22) and a rotation-locking connection (24), a tightening part (32) with locking lugs (33) and a spring (36).
6. Regarding claim 21, Rowland discloses the tightening part is a ring element that plunges axially partway into a ring element of the sealing part in that the bridge portion (34) of the tightening part extends into the sealing part as seen in Figure 1.
7. Regarding claim 23, Rowland discloses a shaft (27) that penetrates the sealing part and the tightening part.
8. Regarding claim 24, Rowland discloses the spring is disposed as a compression spring between the tightening part and the shaft (page 6, lines 15-27).
9. Claims 19, 20, 23 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller (5,615,793).
10. Regarding claim 19, Muller discloses the cap (Figures 1-10, column 2, line 3-67) with sealing part (16) with a sealing ring (88) and a rotation-locking connection (90), a tightening part (38) with locking lugs (50, 52, 54) and a spring (28).

11. Regarding claim 20, Muller discloses the radial flange (18) retained axially immovably but rotatably in the grip in groove (14).
12. Regarding claim 23, Muller discloses the shaft (26) that penetrates the sealing part and tightening part.
13. Regarding claim 27, Muller discloses the locking lugs of the tightening part (50, 52, 54) and the rotation-locking connection element (90) have approximately the same circumferential width as seen in Figure 2.
14. Claims 19, 21-23 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Griffins et al (5,395,004) (Griffin).
15. Regarding claim 19, Griffin discloses the cap (Figures 1-15, column 7, lines 3-63) with sealing part (14) with a sealing ring (34) and a rotation-locking connection (16), a tightening part (18) with locking lugs (20) and a spring (44).
16. Regarding claim 21, Griffin discloses the tightening part is a ring element that plunges axially into a ring element of the sealing ring as seen in Figure 5.
17. Regarding claim 22, Griffin discloses the ring elements are provided with sliding-block elements (38, 46, Figure 5, column 5, lines 30-40).
18. Regarding claim 23, Griffin discloses a shaft (118) that penetrates the sealing part and tightening part.
19. Regarding claim 27, Griffin discloses the locking lugs of the tightening part (20) and the rotation-locking connection element (16) have approximately the same circumferential width as seen in Figure 1.

***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 28 and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller.

22. Regarding claim 28, Muller discloses the claimed invention except for the sealing ring having a toothed sealing face region. It would have been an obvious matter of design choice to have the sealing ring with a toothed sealing face region, since applicant has not disclosed that having the sealing ring with a toothed sealing face region solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the sealing ring configured as disclosed by Muller.

23. Regarding claim 33, Muller discloses a filler neck (60) with a sealing face surrounding the neck opening (adjacent to the sealing ring) and a closure base (58) having at least two diagonally disposed receiving slots (56). Muller does not teach a flat or plane annular sealing face. It would have been an obvious matter of design choice to have a flat or plane sealing face, since applicant has not disclosed that having a flat or plane sealing face solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the sealing face configured as disclosed by Muller. In addition, while Muller does not disclose the flat sealing face, it

is likely the surface of the sealing face in contact with the sealing ring would have some flat area in contact with the sealing ring.

24. Regarding claim 34, Muller discloses the claimed invention except for the flat sealing face being several millimeters wide. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the flat sealing face several millimeters wide, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

25. Regarding claim 35, Muller discloses the underside of the closure base (58) is a flat annular-segmental face as seen in the figures.

26. Regarding claim 36 Muller discloses all of the required structure of the filler neck. The Examiner considers the phrase "cast or molded part" to constitute a product by process limitation that does not affect structure.

#### ***Allowable Subject Matter***

27. Claims 37 and 38 are allowed.

28. Claims 29-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

29. Applicant's arguments filed April 1, 2010 have been fully considered but they are not persuasive. Applicant argues that the rotation-locking connection cannot be found in any of the references of record. Applicant cites the rotation-locking connection in the

specification and drawings with the connection being separate and apart from the locking lugs. In response, applicant fails to specifically point out how the language of the claims patentably distinguishes them from the references. The references of record all disclose a rotation-locking connection and locking lugs separate from the connection as identified in the above action. The references meet the limitations of the claims as presented.

***Conclusion***

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HARRY A. GROSSO whose telephone number is (571)272-4539. The examiner can normally be reached on Monday through Thursday from 7am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Harry A. Grosso  
/Harry A. Grosso/  
Examiner, Art Unit 3781

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